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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/796,600

03/09/2004

Jens Meggers

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EXAMINER

NGUYEN, BRIAN D

ART UNIT

PAPER NUMBER

2616

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/796,600	Applicant(s) MEGGERS ET AL.	
	Examiner BRIAN D. NGUYEN	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-33, 35-38, 43-46, 49-52 and 54-57 is/are rejected.
- 7) ☒ Claim(s) 34, 39-42, 47, 48, 53 and 58-61 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/615,446.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 31, 38, 43, 49, 50, and 57 are rejected under 35 U.S.C. 102(e) as being anticipated by Chawla et al (6,876,668).

Regarding claim 31, Chawla discloses a method for processing a data packet stream in a communications system, with the steps of: receiving a first admission control packet (ACP) that includes a number of admission control parameters (see col. 2, line 40-col. 3, line18; col. 6, lines 14-17; col. 9, lines 8-10; and step 600 in figure 7), reading from the first admission control, packet (ACP) at least one admission control parameter indicating a throughput (RI) required for a real-time processing of a sub-stream of data packets related to the first admission control packet (ACP) (see bandwidth request in step 600 in figure 7), determining a currently available throughput (V) (see step 601 in figure 7), comparing the available throughput (V) with the required throughput (RI), admitting the real-time processing of the sub-stream, if the available throughput (V) is higher than or equal to the required throughput (RI) (see steps 601-605).

Regarding claim 38, Chawla discloses receiving at least one of the admission control parameters from a header of an underlying network protocol (see packet header in figure 2).

Regarding claim 43, Chawla discloses a device in a communications system, comprising: an evaluation means to evaluate at least one control parameter given by at least one control packet (ACP) embedded in a traffic flow (600 in figure 7); a determining unit to determine a currently available throughput (V) of the network node (601 in figure 7); and a decision means to decide under consideration of the currently available throughput (V), whether an incoming data packet traffic flow can be processed at the network node according to real-time requirements given by admission control parameters (601 in figure 7).

Regarding claim 49, Chawla discloses a radio base station for receiving and transmitting of data packet traffic (see wireless transmission in col. 11, lines 25-36).

Regarding claims 50 and 57, claims 50 and 57 are computer program product claims that have substantially the same limitations as the respective method claims 31 and 38. Therefore, they are subject to the same rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 32-33, and 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chawla in view of Ganz et al (6,049,549).

Regarding claims 32 and 51, Chawla does not specifically disclose reading of a maximum throughput (Rh), with the additional step of choosing: for the sub-stream a throughput

Art Unit: 2616

between the required throughput (RI) and a minimum of the maximum throughput (Rh) and the available throughput (V). However, Ganz discloses these limitations (see col. 14, lines 42-50).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to choose the throughput for the sub-stream as taught by Ganz in the system of Chawla in order to improve system performance.

Regarding claims 33 and 52, Chawla discloses sending the sub-stream if it is admitted for real-time processing to a packet scheduler for real-time processing (see scheduler in figure 4 and other steps in figure 7).

5. Claims 35-36, 44-45, and 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chawla in view of Dubuc (6,603,739).

Regarding claims 35 and 54, Chawla does not specifically disclose sending the sub-stream if it is not admitted for real-time processing to a packet scheduler for non-real-time processing. However, Dubuc discloses buffering the data in the event no bandwidth is available for later processing (see col. 22, lines 12-17). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to buffer the data as taught by Dubuc in the system of Chawla in order to avoid discarding the data.

Regarding claims 36 and 55, Dubuc further discloses the use of FIFO queue (see col. 17, lines 43-44).

Regarding claim 44, Chawla discloses all the claimed subject matters as described in previous paragraphs including using a plurality of prioritized queues to provide a specific level of service of QoS (see col. 3, lines 11-14). Chawla does not specifically disclose forwarding a data packet flow after a negative decision to a second queue. However, Dubuc discloses

Art Unit: 2616

buffering the data in the event no bandwidth is available for later processing (see col. 22, lines 12-17). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to buffer the data as taught by Dubuc in the system of Chawla in order to avoid discarding the data.

Regarding claim 45, Chawla discloses an output interface (OI) that prioritizes the queues and that reads out data packets from the queues (see col. 3, lines 9-11).

6. Claims 37 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chawla in view of Smith et al (7,035,211).

Regarding claims 37 and 56, Chawla does not specifically disclose generating and returning from: an admission controller (AC) along the sub-stream's transmission path a modified admission control packet comprising throughput capability parameters of the admission controller (AC). However, Smith discloses a feedback means for returning a modified admission control packet (see col. 3, lines 1-5). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the feedback means as taught by Smith in the system of Chawla in order to reduce packet loss due to the limitation of bandwidth available for the path in the system.

7. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chawla in view of Dubuc as applied to claim 45 above, and further in view of Pavan et al (6,801,943).

Regarding claim 46, Chawla does not specifically disclose a calculator unit for calculations of deadlines for data packets. However, Pavan discloses this limitation (see col. 6, lines 13-21). Therefore, it would have been obvious to a person of ordinary skill in the art at the

time the invention was made to use the deadline based scheduling as taught by Pavan in the system of Chawla in order to meet the design criteria of a particular implementation.

Allowable Subject Matter

8. Claims 34, 39-42, 47-48, 53, 58-61 would be allowable if rewritten to overcome the objection(s) and/or rejection(s) under 35 U.S.C. 112, 2nd paragraph and the double patenting rejection, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments filed 3/11/08 have been fully considered but they are not persuasive. The applicant argues that Chawla does not teach or suggest that a specific admission control packet is used to provide admission control parameters to an Admission Controller. The examiner respectfully disagrees because the QoS and the bandwidth request taught by Chawla are admission control parameters indicating a specific amount of bandwidth/throughput required.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2616

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN D. NGUYEN whose telephone number is (571)272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

4/1/08

/Brian D Nguyen/

Application/Control Number: 10/796,600
Art Unit: 2616

Page 8

Primary Examiner, Art Unit 2616